STATUS OF THE CLAIMS

Claims 1-27 were originally filed in this patent application. In response to a first office action dated 04/19/2006, an amendment was filed on 07/19/2006 that cancelled claims 16-17, 21-22 and 24-25 and amended claims 15, 20 and 23. In the pending office action dated 10/04/2006, claims 1-15, 18-20, 23 and 26-27 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,666,526 to Reiter *et al.* (hereinafter "Reiter"). No claim was allowed. No claim has been amended in this Request for Reconsideration. Claims 1-15, 18-20, 23, and 26-27 are currently pending.

REMARKS

Rejection of claims 1-15, 18-20, 23 and 26-27 under 35 U.S.C. §102(b)

The examiner rejected claims 1-15, 18-20, 23 and 26-27 under 35 U.S.C. §102(b) as being anticipated by Reiter. Each of these claims is addressed below.

Claim 1

In rejecting claim 1, the examiner states that Reiter teaches "the database query processor processing a first query to generate a first result set by interrogating a database", citing col. 4 lines 59-64 and col. 10 lines 3-58 of Reiter. The examiner then states that Reiter teaches "if a second query may be satisfied by the first result set, generating a second result set from the first result set without caching the first result set and without interrogating the database for the second query", citing col. 4 lines 43-45, col. 6 lines 17-30, and col. 10 line 25 to col. 11 line 7 of Reiter. Applicant respectfully submits that Reiter does not teach all of the limitations in claim 1, and the examiner's rejection of claim 1 based on Reiter fails to establish a prima facie case of anticipation for claim 1 under 35 U.S.C. §102(b).

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In the rejection of claim 1, the examiner fails to provide a detailed mapping of the teachings of Reiter on each and every limitation in claim 1. The examiner apparently reads the query table in Reiter on the first result set in claim 1. However, the examiner has not indicated any teaching in Reiter that reads on the second result set in claim 1. As a result, the examiner has failed to establish a prima facie case of anticipation for claim 1 under 35 U.S.C. §102(b).

In the rejection, the examiner cites to many different parts of Reiter as allegedly reading on "if a second query may be satisfied by the first result set, generating a second result set from the first result set without caching the first result set and without interrogating the database for the second query." However, the express teachings in the cited portions of Reiter and elsewhere in Reiter do not support the examiner's rejection. The examiner appears to equate the query table in Reiter to the result set in claim 1. Note, however, that Reiter discusses two distinct and very different types of query tables. A conventional (*i.e.*, prior art) query table holds the query result, which is data copied from the source tables. See Reiter at col. 2 lines 1-4 and 62-66. This conventional query table can be properly read on the first result set in claim 1. Applicants' specification at p. 2 lines 3-5 states:

> The database is searched for records that satisfy the query, and those
> records are returned as the query result, which is also known as a "result
> set".

A result set, as defined in applicants' specification, is a set of database records that satisfy a query. This is consistent with the conventional query table discussed in Reiter at col. 2 lines 1-4 and 62-66. This is also consistent with the definition of "result set" from Wikipedia, which states:

> An SQL result set is a set of rows from a database, as well as
> meta-information about the query such as the column names, and the types
> and sizes of each column. . . . A result set is effectively a table.

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Reiter defines a new and different type of query table referred to as a Referenced Virtual Query Table (RVQT) which contains references, called bookmarks, that each uniquely identify a particular row of a particular source table, rather than a base table containing actual data copied from source tables. See Reiter at col. 4 lines 36-42. By containing bookmarks instead of data, the RVQT in Reiter assures that data returned for a query is not stale because data is referenced in the base table instead of referencing a copy of the data in a conventional query table (or result set). Because the RVQT in Reiter contains bookmarks instead of data, the RVQT in Reiter does not contain a set of records that satisfy a query, and thus does not read on the "first result set" in claim 1. For this reason alone, claim 1 is allowable over Reiter.

In the rejection, the examiner states that Reiter teaches "if a second query may be satisfied by the first result set, generating a second result set from the first result set without caching the first result set and without interrogating the database for the second query", citing col. 4 lines 43-45, col. 6 lines 17-30, and col. 10 line 25 to col. 11 line 7 of Reiter. Applicants respectfully assert that the teachings of Reiter expressly teach away from these limitations in claim 1.

For the examiner's rejection to have merit, Reiter would have to teach generating a second RVQT from a first RVQT without caching the first RVQT and without interrogating the database for the second query. Reiter has no teaching whatsoever about generating a second RVQT from a first RVQT. The first RVQT in Reiter is stored for later use, and is thus effectively cached, which expressly teaches away from "without caching the first result set" recited in claim 1. Furthermore, all queries in Reiter interrogate the database. In fact, the primary purpose and function of the RVQT in Reiter is to replace copies of data in the query table with bookmarks that reference data in the underlying tables so that the current data in the underlying tables is always accessed for each and every query that is executed. Reiter thus expressly teaches away from "without interrogating the database for the second query" as recited in claim 1. In Reiter, the

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RVQT is stored (cached) for later use, and each query interrogates the database. As a result, Reiter expressly teaches away from the limitations in claim 1, so claim 1 is allowable over Reiter. Applicants respectfully request reconsideration of the examiner's rejection of claim 1 under 35 U.S.C. §102(b).

Claim 2

As explained above with reference to claim 1, the RVQT in Reiter does not read on the first result set in claim 2. While Reiter does teach accessing several queries at the same time at col. 6 lines 40-41, there is no teaching in Reiter of determining whether a query is satisfied by a result set of a different query. Furthermore, if the RVQT in Reiter reads on the first result set in claim 2, what teaching in Reiter reads on using the first result set to generate at least one other result set for any of the at least one other query that is satisfied by the first result set, as expressly recited in claim 2? Because the examiner has not identified what teaching in Reiter reads on "the at least one other result set" in claim 2, the examiner has failed to establish a prima facie case of anticipation for claim 2 under 35 U.S.C. §102(b). Nowhere does Reiter teach or suggest determining whether at least one other query is satisfied by the result set of a different query, and using the first result set to generate at least one other result set for any of the at least one other query that is satisfied by the first result set. As a result, claim 2 is allowable over Reiter. In addition, claim 2 depends on claim 1, which is allowable for the reasons given above. As a result, claim 2 is also allowable as depending on an allowable independent claim. Applicants respectfully request reconsideration of the examiner's rejection of claim 2 under 35 U.S.C. §102(b).

Claim 3

In rejecting claim 3, the examiner simply recites all of the limitations in claim 3 then cites to col. 6 lines 31-52 and col. 10 line 25 to col. 11 line 7. The examiner used

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these same citations in rejecting claim 2. Because the examiner has not identified what teachings in Reiter allegedly read on the limitations in claim 3, the examiner has failed to establish a prima facie case of anticipation for claim 3 under 35 U.S.C. §102(b). Claim 3 contains many additional limitations not included in claim 2 which are not addressed in the cited portions of Reiter. Nowhere does Reiter teach or suggest delaying the processing of a plurality of received queries. Nowhere does Reiter teach or suggest grouping compatible received queries together. Nowhere does Reiter teach or suggest generating a new query for each group that will produce a result set that will satisfy all queries in the group, processing each new query, and generating from the result set of each new query at least one other result set for queries in the group corresponding to the new query. NONE of the limitations in claim 3 are taught or suggested by Reiter. As a result, claim 3 is allowable over Reiter. In addition, claim 3 depends on claim 1, which is allowable for the reasons given above. As a result, claim 3 is also allowable as depending on an allowable independent claim. Applicants respectfully request reconsideration of the examiner's rejection of claim 3 under 35 U.S.C. §102(b).

Claim 4

Claim 4 includes many limitations similar to those in claim 2 addressed above, and is therefore allowable for the same reasons given above for claim 2. Applicants respectfully request reconsideration of the examiner's rejection of claim 4 under 35 U.S.C. §102(b).

Claim 5

Claim 5 includes many limitations similar to those in claim 3 addressed above, and is therefore allowable for the same reasons given above for claim 3. Applicants respectfully request reconsideration of the examiner's rejection of claim 5 under 35 U.S.C. §102(b).

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Claim 6

Claim 6 recites "wherein the database query processor delays processing the plurality of received queries for a predetermined period of time." The portion of Reiter the examiner cites as allegedly teaching this limitation has no mention of delaying the processing of received queries for any reason. To the contrary, the cited portion of Reiter teaches accessing several queries at the same time at col. 6 lines 40-41, which expressly teaches away from delaying the processing of received queries as recited in claim 6. For these reasons, claim 6 is allowable over Reiter. In addition, claim 6 depends on claim 5, which is allowable for the reasons given above. As a result, claim 6 is also allowable as depending on an allowable independent claim. Applicants respectfully request reconsideration of the examiner's rejection of claim 6 under 35 U.S.C. §102(b).

Claim 7

Claim 7 recites "wherein the database query processor delays processing the plurality of received queries until a predetermined number of the plurality of queries has been received." The portion of Reiter the examiner cites as allegedly teaching this limitation has no mention of delaying the processing of received queries for any reason. To the contrary, the cited portion of Reiter teaches accessing several queries at the same time at col. 6 lines 40-41, which expressly teaches away from delaying the processing of received queries as recited in claim 7. For these reasons, claim 7 is allowable over Reiter. In addition, claim 7 depends on claim 5, which is allowable for the reasons given above. As a result, claim 7 is also allowable as depending on an allowable independent claim. Applicants respectfully request reconsideration of the examiner's rejection of claim 7 under 35 U.S.C. §102(b).

Claim 8

Claim 8 is a method claim with limitations similar to those in claim 1, which is addressed above. As a result, claim 8 is allowable for the same reasons given above with respect to claim 1. Applicants respectfully request reconsideration of the examiner's rejection of claim 8 under 35 U.S.C. §102(b).

Claim 9

Claim 9 is a method claim with limitations similar to those in claim 2, which is addressed above. As a result, claim 9 is allowable for the same reasons given above with respect to claim 2. Applicants respectfully request reconsideration of the examiner's rejection of claim 9 under 35 U.S.C. §102(b).

Claim 10

Claim 10 is a method claim with limitations similar to those in claim 3, which is addressed above. As a result, claim 10 is allowable for the same reasons given above with respect to claim 3. Applicants respectfully request reconsideration of the examiner's rejection of claim 10 under 35 U.S.C. §102(b).

Claim 11

Claim 11 is a method claim with limitations similar to those in claim 4, which is addressed above. As a result, claim 11 is allowable for the same reasons given above with respect to claim 4. Applicants respectfully request reconsideration of the examiner's rejection of claim 11 under 35 U.S.C. §102(b).

Claim 12

Claim 12 is a method claim with limitations similar to those in claim 5, which is addressed above. As a result, claim 12 is allowable for the same reasons given above with respect to claim 5. Applicants respectfully request reconsideration of the examiner's rejection of claim 12 under 35 U.S.C. §102(b).

Claims 13-14

Claims 13-14 are method claims with limitations similar to those in claims 6 and 7, respectively, which are addressed above. As a result, claims 13-14 are allowable for the same reasons given above with respect to claims 6-7, respectively. Applicants respectfully request reconsideration of the examiner's rejection of claims 13-14 under 35 U.S.C. §102(b).

Claim 15

Claim 15 is a program product claim with limitations similar to those in claim 1, which is addressed above. As a result, claim 15 is allowable for the same reasons given above with respect to claim 1. Applicants respectfully request reconsideration of the examiner's rejection of claim 15 under 35 U.S.C. §102(b).

Claim 18

Claim 18 is a program product claim with limitations similar to those in claim 2, which is addressed above. As a result, claim 18 is allowable for the same reasons given above with respect to claim 2. Applicants respectfully request reconsideration of the examiner's rejection of claim 18 under 35 U.S.C. §102(b).

Claim 19

Claim 19 is a program product claim with limitations similar to those in claim 3, which is addressed above. As a result, claim 19 is allowable for the same reasons given above with respect to claim 3. Applicants respectfully request reconsideration of the examiner's rejection of claim 19 under 35 U.S.C. §102(b).

Claim 20

Claim 20 is a program product claim with limitations similar to those in claim 4, which is addressed above. As a result, claim 20 is allowable for the same reasons given above with respect to claim 4. Applicants respectfully request reconsideration of the examiner's rejection of claim 20 under 35 U.S.C. §102(b).

Claim 23

Claim 23 is a program product claim with limitations similar to those in claim 5, which is addressed above. As a result, claim 23 is allowable for the same reasons given above with respect to claim 5. Applicants respectfully request reconsideration of the examiner's rejection of claim 23 under 35 U.S.C. §102(b).

Claims 26-27

Claims 26-27 are program product claims with limitations similar to those in claims 6 and 7, respectively, which are addressed above. As a result, claims 26-27 are allowable for the same reasons given above with respect to claims 6-7, respectively. Applicants respectfully request reconsideration of the examiner's rejection of claims 26-27 under 35 U.S.C. §102(b).

Invitation to the Examiner

Should the examiner decide to maintain the rejections of any of the pending claims, applicants respectfully invite the examiner to provide a detailed mapping of the teachings of Reiter on each and every limitation in the claims so the examiner's rejection may be adequately addressed on appeal. For example, applicants invite the examiner to specifically identify what teachings of Reiter allegedly read on each of the following limitations: second result set, at least one other result set, delays processing a plurality of received queries, groups compatible received queries together, new query, at least one other result set, predetermined time period, and predetermined number of the plurality of queries.

Conclusion

In summary, Reiter does not teach, support, or suggest the unique combination of features in applicants' claims presently on file. Therefore, applicants respectfully assert that all of applicants' claims are allowable. Such allowance at an early date is respectfully requested. The Examiner is invited to telephone the undersigned if this would in any way advance the prosecution of this case.

Respectfully submitted,

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